

2019

MCA

5<sup>th</sup> Semester Examination

( Answer All Questions )

Full Marks: 70

Times: 3 Hrs

1. (a) Write a program in java to evaluate the prime number from 1 to 100 using sieve of eratosthenes and ArrayList. [10]  
 (b) What is Collection Framework ? State any four class of the collection framework. [4]

OR

- (c) Match the Column A with Column B by writing an expression in column B: [4]

**Column A****Column B**

contains( )

\_\_\_\_\_

Set( )

\_\_\_\_\_

toArray( )

\_\_\_\_\_

lastIndexOf( )

\_\_\_\_\_

- (d) Write a program to store at least 5 fruits name in both array list and array then explain the distinction between them with merits and demerits. [10]
2. (a) write a java script program to find summation of two number with textbox in HTML [10]  
 (b) Explain **with** statement of java script? [4]

OR

- (c) What is Event Handling? Explain each of the java script event Handlers. [10]  
 (d) Compare the followings operators of java script : [2x2]  
 (i) == vs. ===  
 (ii) >> vs. >>>
3. (a) Write a JDBC program with registerDriver( ) and create a **student** table with column such as (Roll, Name, Course, Phone) where Roll is the primary key. [8]  
 (b) Distinguish between executeQuery() and executeUpdate() method of Statement class. [6]

OR

- (c) What is preparedStatement? Write a program to insert data into the above **student** table using preparedStatement( ). [9]  
 (d) Briefly explain four types of JDBC drivers. [5]
4. (a) Build a JSP project to take UserName and Password with two textBox and a login Button and after successful validation of credential display the welcome page with username. [10]  
 (b) Design a simple JSP page to display the visitor number (no. of times user visited). [4]

OR

- (c) What is *Scriptlet* in JSP ? Write a jsp program to display summation of 1 to 10 using *scriptlet* and loop. [5]  
 (d) Build a JSP project to receive a name with a textBox and he may be ask to select his favorite programming language using a dropDown list. Process these data using <jsp:usebean> and display a welcome page with his name and language. [9]

5. (a) What is Java Bean? Explain the advantages of Java beans. [6]  
(b) What is introspection? Explain the classes such as: Introspector, PropertyDescriptor, EventSetDescriptor, MethodDescriptor. [8]

**OR**

- (c) Write Short Notes on : [4]  
(i) Stateful Session Bean vs. Stateless Session Bean  
(ii) JavaBean Vs. Enterprise JavaBean  
(d) write a program to illustrate various aspects of bean programming including introspection, BeanInfo class. [10]

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